

# PATENT COOPERATION TREATY

From the:  
INTERNATIONAL SEARCHING AUTHORITY

To:

**WRAY & ASSOCIATES**  
Level 4 The Quadrant  
1 William Street  
PERTH WA 6000

**WRAY & ASSOCIATES**  
30 MAR 2004

**PCT**

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing (day/month/year) **29 MAR 2004**

Applicant's or agent's file reference  
**110550/gbc**

**FOR FURTHER ACTION**  
See paragraph 2 below

International application No.  
**PCT/AU2004/000089**

International filing date (day/month/year)  
**22 January 2004**

Priority date (day/month/year)  
**22 January 2003**

International Patent Classification (IPC) or both national classification and IPC  
**Cl. 7 A61N 2/10**

Applicant  
**SIRTEX MEDICAL LIMITED et al**

<b>ENTERED</b>	<b>BY</b>
<b>3 - MAR 2004</b>	<i>JR</i>
<b>INPROMA</b>	<i>AO-ACC added for 22/11/04 (22 months del)</i>

1. This opinion contains indications relating to the following items:

- |                                     |              |  |
|-------------------------------------|--------------|--|
| <input checked="" type="checkbox"/> | Box No. I    | Basis of the opinion   |
| <input type="checkbox"/>            | Box No. II   | Priority   |
| <input type="checkbox"/>            | Box No. III  | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability   |
| <input type="checkbox"/>            | Box No. IV   | Lack of unity of invention   |
| <input checked="" type="checkbox"/> | Box No. V    | Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/>            | Box No. VI   | Certain documents cited  |
| <input type="checkbox"/>            | Box No. VII  | Certain defects in the international application   |
| <input type="checkbox"/>            | Box No. VIII | Certain observations on the international application  |

## 2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the IPEA/AU  
AUSTRALIAN PATENT OFFICE  
PO BOX 200, WODEN ACT 2606, AUSTRALIA  
E-mail address: [pct@ipaaustralia.gov.au](mailto:pct@ipaaustralia.gov.au)  
Facsimile No. (02) 6285 3929

Authorized Officer  
**JAMES DZIEDZIC**  
Telephone No. (02) 6283 2495

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/AU2004/000089

**Box No. I      Basis of the opinion**

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.  
☐ This opinion has been established on the basis of a translation from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material  
☐ a sequence listing  
☐ table(s) related to the sequence listing
  - b. format of material  
☐ in written format  
☐ in computer readable form
  - c. time of filing/furnishing  
☐ contained in the international application as filed.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/AU2004/000089

**Box No. V**      **Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Claims	YES
	Claims 1-18	NO
Inventive step (IS)	Claims	YES
	Claims 1-18	NO
Industrial applicability (IA)	Claims 1-18	YES
	Claims	NO

**2. Citations and explanations:**

The invention in its broadest form is directed to a composition which includes nanomagnetic particles and a matrix. The nanomagnetic particles can be a wide range of metals and the matrix can be basically any material. These particles can be used in hyperthermic applications.

Documents cited and considered:-

- (i) US 6048515 A (KRESSE)
- (ii) US 5427767 A (KRESSE)
- (iii) US 6541039 B1 (LESNIAK)
- (iv) WO 2001/037721 A (THE RESEARCH FOUNDATION OF STATE UNIVERSITY OF NEW YORK)
- (v) EP 1175237 B (MAGFORCE APPLICATIONS GMBH)
- (vi) Derwent Abstract Accession No. 98-053288/06 Class A96 B07 D16 DE 19624426 A (BREGEMANN)
- (vii) US 2002/0027262 A1 (PARK)
- (viii) US 2003/0168640 A1 (KIRSTEN)
- (ix) Jordan et al. Magnetic fluid hyperthermia (MFH): Cancer treatment with AC magnetic field induced excitation of biocompatible superparamagnetic nanoparticles
- (x) Pouliquen, Daniel. Magnetite-dextran nanocapsules : Preparation and properties.

Novelty

Documents (i) to (x) all disclose nano sized magnetic particles which are in a matrix. As the cited documents disclose many of the specific embodiments of the present invention, the physical properties of claims 3 to 7 are deemed to be also inherently disclosed. All the above documents except for (vii) and (viii) disclose the use of such particles in medical therapy. Document (ix) discusses specific absorption rates (SAR).

Inventive Step

As above for novelty.

From the above the present invention clearly lacks both novelty and inventiveness.